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OPERATIONAL ASPECTS OF DESERT SHIELD AND DESERT STORM

BY

Lieutenant Colonel Henry C. Shirah
United States Army

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92-12425



REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION / AVAILABILITY OF REPORT UNLIMITED		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION U.S. ARMY WAR COLLEGE		6b. OFFICE SYMBOL (If applicable)		7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) ROOT HALL, BLDG 122 CARLISLE, PA 17013-5050		7b. ADDRESS (City, State, and ZIP Code)			
8a. NAME OF FUNDING / SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS			
		PROGRAM ELEMENT NO.		PROJECT NO.	TASK NO.
					WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) OPERATIONAL ASPECTS OF DESERT SHIELD AND DESERT STORM					
12. PERSONAL AUTHOR(S) HENRY C SHIRAH					
13a. TYPE OF REPORT Study Project		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) 92/03/12	
15. PAGE COUNT 45					
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	LEADERSHIP, INTELLIGENCE, ELECTRONIC WARFARE,		
			CEWI, MORALE, TRAINING, DOCTRINE		
19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS					
21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED					
22a. NAME OF RESPONSIBLE INDIVIDUAL Douglas V. Johnson II, LTC, U.S. Army			22b. TELEPHONE (Include Area Code) (717) 245-3010		22c. OFFICE SYMBOL AWCI

The author served as battalion commander of the 533d Military Intelligence Battalion, 3d Armored Division from June 1989 through July 1991. He concisely reviews doctrine, training, leadership and a variety of other experiences that affected his command, and its role in the Gulf War. Sometimes brutally forthright, he shares his views and opinions concerning his own shortcomings, the "welfare" Army, inadequate equipment, stress, women in war and a few anecdotal examples of each. There is considerable mention of the 3d Armored Division Commander, Major General Paul Funk, who is a soldier's soldier. The writer points out with a number of examples of General Funk's execution of training which the author believes was the key to success in battle. The author clearly takes responsibility for the content of the paper recognizing his opinions are not popular nor representative of the intelligence community or Army leadership.

USAWC MILITARY STUDIES PROGRAM PAPER

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OPERATIONAL ASPECTS OF DESERT SHIELD AND DESERT STORM

AN INDIVIDUAL STUDY PROJECT

by

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Availability Codes	
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A-1	

ABSTRACT

AUTHOR: Henry C. Shirah, LTC, USA

TITLE: Operational Aspects of Desert Shield and Desert Storm

FORMAT: Individual Study Project

DATE: 25 February 1992 PAGES: 45 CLASSIFICATION: Unclassified

The author served as battalion commander of the 533d Military Intelligence Battalion, 3d Armored Division from June 1989 through July 1991. He concisely reviews doctrine, training, leadership and a variety of other experiences that affected his command, and its role in the Gulf War. Sometimes brutally forthright, he shares his views and opinions concerning his own shortcomings, the "welfare" Army, inadequate equipment, stress, women in war and a few anecdotal examples of each. There is considerable mention of the 3d Armored Division Commander, Major General Paul Funk, who is a soldier's soldier. The writer points out with a number of examples of General Funk's execution of training which the author believes was the key to success in battle. The author clearly takes responsibility for the content of the paper recognizing his opinions are not popular nor representative of the intelligence community or Army leadership.

INTRODUCTION

The fundamental job of any commander beginning on the day he or she assumes command is to prepare their unit for combat and prepare themselves to lead their unit in combat. Every task, every activity occurring in the unit should orient on, and contribute to, combat readiness. The purpose of this paper is to describe key operations and training events, along with thoughts on what tools-of-the-trade worked and what did not, of the 533d Military Intelligence Battalion (MIB), 3d Armored Division leading up to and during Desert Shield and Desert Storm.

This paper represents the personal assessment of the author who served as the 533d commander from June 1989 through July 1991. The story presented here is based on memory and the author's personal wartime journal that covered the period from 10 November 1990 through 21 May 1991. The journal was turned over to the United States Army War College Strategic Studies Institute in January 1992 serving the purpose of recording one commander's view of an MIB under combat conditions. Readers may want to review the journal for a more intimate glimpse of the history behind this essay.

Regarding lessons learned, doctrinal discussions and recommendations for the future; all are the author's opinion and do not necessarily represent the positions of the Army Intelligence community and senior leadership. Other Military Intelligence (MI) officers, including those who served in the unit, may have an entirely different view of the same event which may

be as valid as the author's. This is simply one soldier's story.

CHAPTER 1

ORGANIZATION AND DOCTRINE

Communications, Electronic-Warfare, Intelligence (CEWI) units, battalions and brigades, were created to provide combat commanders with organic intelligence collection resources. They were an outgrowth of the Vietnam experience in an effort to breakdown the intelligence security (green door) barrier; particularly regarding signals intelligence (SIGINT).

The 533d MIB was considered a state of the art unit. Like the rest of the Army, it was structured to fight a European threat i.e. the Fulda Gap scenario. The battalion was organized as described in Field Manual (FM) 34-10, Division Intelligence and Electronic Warfare Operations, dated November 1986.(1) For the sake of the reader, the 533d organization is briefly described in the next few pages.

The Headquarters and Service Company (HHSC) contained the usual support elements. It also housed the Technical Control and Analysis Element (TCAE) euphemistically called the electronic fire direction center. As a slight deviation from doctrinal organization, the radio retransmission teams from Company A were attached to HHSC. So critical were these teams to the overall

unit mission that they were under the control of the battalion commander through the S3.

Company A (Collection and Jamming) was a composite of track and wheel mounted intelligence collection and electronic warfare assets. It was a three platoon company. These platoons formed the core for direct support company teams supporting the division maneuver brigades and thereby experienced the most training at the combat maneuver training center (CMTC).

Company B (Intelligence and Surveillance) contained a platoon of twelve ground surveillance radars (GSR) and a platoon consisting of counterintelligence and interrogator soldiers. Radars were normally distributed among the three maneuver brigades and the division cavalry squadron unless otherwise task organized by the division operations order. Like the assets from Company A, the radar platoon experienced quite a lot of training at CMTC.

Company C (Electronic Warfare), organized as a single platoon, possessed the most capable electronic collection and direction finding system in the MIB. Yet, the system (Trailblazer) was the slowest tracked vehicle in the battalion and in the division. Trailblazer's speed presented the greatest problems for deployment in training and on the battlefield. The Trailblazer concept for deployment is adequately described in FM 34-80, Brigade and Battalion Intelligence and Electronic Warfare Operations, dated April 1986.(2) Importantly, this asset was considered to be state-of-the-art, ground-based SIGINT collection hardware. As discussed further on, like the rest of the MIB electronic intelligence resources, Trailblazer was

in some ways inadequate under combat conditions.

Detachment D (Long Range Surveillance Detachment or LRSD) was the most recent addition to the MIB. It consisted of some forty infantrymen plus signal soldiers to provide long haul high frequency communications. Assignment of the LRSD to the MIB was a source of controversy within Army leadership. Despite doctrine, the 3d Armored Division's LRSD was attached to the division cavalry squadron just after the MIB arrived in Southwest Asia. That did not change until redeployment to Germany.

Other than the LRSD and radio relay teams, there were no other significant deviations from doctrine with (MIB) organization. In fact, doctrine was carefully adhered to to assure standardization and understanding among the battalion leadership. This was the practice during the author's command tenure. The 533d MIB trained within the Army Airland Battle Doctrine and was comfortable with its mission in the European environment. As such, it is worthwhile to provide background on the battalion's German experience prior to shipping out for war.

CHAPTER 2

TRAINING ENVIRONMENT

The battalion deployed completely into the German countryside in Fall 1989 for Exercise CARAVAN GUARD. This was a division level force-on-force exercise requiring the battalion to organize for combat and maneuver its assets in support of the division operations plan. The exercise was designed as a training phase for REFORGER 1990 planned for January. REFORGER 1990 was also force-on-force and provided the best warfighting training possible for the battalion in terms of refining command and control procedures and maneuver of assets in general support of the division. As with most exercises, SIGINT collection training was nil.

Interspersed between these two major exercises were several company team level deployments to CMTC at Hohenfels. This was not ideal training either for collection system operators, but it did exercise the equipment and provide leadership training for platoon leaders and company team commanders. Company teams were not allowed inside the CMTC maneuver box due to limited maneuver area. In fact, a common shortfall for training intelligence soldiers in CEWI units is the consistent lack of a real, foreign language speaking opponent despite superb efforts to provide facilities

to makeup the shortfall.

On top of field exercises, the division commander, Major General Paul Funk, generated several Battle Command Training Program (BCTP) seminars along with a demanding Warfighter Exercise. These were exceptionally valuable tools for battalion commanders and higher to learn how the commanding general wanted to fight his division as well as a superb means for leader team building. The author's opinion is that General Funk's fundamental intent from the day he took command was to build a fighting team throughout the division; he never relented from that objective.

There was no lack of hard, challenging training for leaders and their soldiers as a prelude to war. General Funk ensured that training was conducted and evaluated to Army standards. His philosophy of doing everything to standard permeated the division. He personally received quarterly training briefings from the separate battalions and made it a point to make the separate battalions feel like true members of the fighting team. Most importantly, he demanded integrity in reporting readiness. The author always felt at ease delivering the bad news as well as the good. With General Funk, too much good news sometimes resulted in good natured skepticism. General Funk's adherence to training and operational doctrine without embellishment provided a solid foundation for war preparation, particularly for the 533d MIB. The 3d Armored Division was clearly a commander's division. That is, battalion commanders were not micromanaged but were empowered to lead and prepare their units for combat as long as Army doctrine was used as the standard. The author never felt in competition with peers

but instead with Army standards. Further, commanders were not having to struggle with strange, new "good" ideas that needlessly interrupt training schedules.

Individual soldier training was additionally supported by an unyielding commitment to five hours per week of sergeant's-time training. During this period on Wednesdays, every soldier was dedicated to his section, squad or platoon level NCO for structured training. Interestingly, Nuclear, Biological, Chemical (NBC) defensive training was a favorite among trainers due to the availability of training aids and ease of garrison training. In fact, the author became irritated on more than one occasion that NBC training tended to dominate sergeant's time. As future events dictated, the author had to "eat" that one.

Demonstratively, Army training doctrine worked at the collective and individual training levels. Mission Essential Task Lists (METL) provided the necessary focus for all levels of command and forced concentration on the fundamentals of warfighting. It is essential that all leaders understand training doctrine and methodology. In hindsight, more attention should have been paid to training leaders in the 533d, particularly sergeants. It is not sufficient just to train combat skills; the how-to-train is equally vital. More effective training would have been achievable with more attention on training the trainer.

While soldiers received superb training during sergeant's time, and likewise the battalion commander during BCTP seminars; much more should have been done with the junior officers. The Military Skills Qualification

(MSQ) program is applicable, but is very time consuming to execute. The division rightly established a rites-of-passage program to fully integrate officers into the division mission, but the program was overcome by the war. Junior officer training is absolutely required for combat readiness.

If the author had to choose just one area to redo, it would be officer training. A recommended starting point would include a close scrutiny of Colonel Roger H. Nye's book, The Challenge of Command which quotes then Colonel Pete Dawkins who said, "I don't believe it's naive or unrealistic to expect junior officers to read. It wouldn't take all that much time or effort, and doing so would help them gain a much richer and fuller image of themselves as soldiers."(3) While not intending to engage in self-excoriation, the author probably let his officers down in this area more than any other.

An enforced reading program is the quintessence of a career-long understanding of the profession of arms. In all of the MIB training, there was never a real tool to instill the foreboding sense of battle or the shock of combat. Training centers provide for skill development, but a supplemental reading program can provide battlesense. Along with the reading requirement, formal staffrides would have also assisted. Frankly, the author did not fully recognize just how much dependence on junior officers existed until deployment to the Gulf began. There always seemed to be time to do something important in the future, only time ran out.

CHAPTER 3

SUPPORT TO BRIGADES

As previously stated, the division MIB exists to support the combat elements within the division operations order task organization. Field Manual 34-80 is explicit in doctrinal support. The manual discusses in some detail the concept of an Intelligence, Electronic-Warfare Support Element (IEWSE) as the nominal support component to a maneuver brigade. (4)

For the 533d, an IEWSE varied structurally depending on the factors of METT-T. Usually a brigade IEWSE consisted of a mix of SIGINT collectors, jammers, GSRs and a liaison officer. At the CMTC, the IEWSE was company team size. However, on CARAVAN GUARD and REFORGER, IEWSEs consisted of only a GSR section and a liaison officer. Brigade commanders always wanted a complete company team at the CMTC but were willing to relinquish electronic collection assets to the command of the MIB on major exercises. This situation enabled the battalion to train in the direct and general support roles which ultimately paid off during Desert Storm.

Holding assets under the direct command and control of the MIB and providing general support to the division enabled the battalion to maneuver

scarce resources in support of the division commander's plan. In reality, putting electronic collection assets in direct support of a brigade results in reduced use, logistics support problems and extreme difficulty in quickly adjusting to new task organizations. This training flexibility turned out to be a blessing in Southwest Asia since company teams were not task organized to support brigades during Desert Shield or Desert Storm.

The key lesson in the form of support rendered is that the MIB must be viewed as a maneuver element that focuses support based on the division operations order rather than the politically expedient norm of keeping the brigade commanders happy regardless of METT-T. Attempting to provide three equally capable IEWSEs to maneuver brigades begs the question of applying principles of war to the MIB. Maneuver brigades changing missions on the move, say from the main attack to reserve, often resulted in losing and endangering MIB assets in the confusion. In a practical sense, the MIB is better suited to command and control the electronic collection resources for maneuver purposes. To their credit, the senior leadership of the 3d Armored Division tolerated diversity within doctrine despite having been accustomed to direct support company team IEWSEs in previous experience. Significantly, the 533d was able to train in a flexible environment in Germany. In turn, it was all the more ready to adapt to the new demands eventually found in the deserts of Saudi Arabia, Iraq and Kuwait.

CHAPTER 4

PREPARATIONS FOR DEPLOYMENT

Despite anticipation, actual notification of deployment still came as a jolt to the unit. Although preliminary work was done to prepare for movement, the order to execute caused events to occur, such as preparation for overseas movement (POM) processing, that otherwise would not have happened.

Personnel Readiness. Perhaps the most frustrating and aggravating part of the POM process was discovering that some seventy-five soldiers of all grades were nondeployable by Army standards. Regardless of having recently arrived from CONUS, there were a number of soldiers deficient in having two pairs of military spectacles, no current HIV test on file or others awaiting follow-up medical appointments of varying kinds. Outrageously, soldiers found fit to deploy to Europe were now unable to deploy to a "hot" theater. It seemed to the author that the root cause for this situation lay in the fact that commands everywhere tend to give up on departing soldiers and take no responsibility for their fitness to serve in their next assignment. It is left up to a personnel service center

to determine readiness to transfer to a new duty station.

For months the 97th General Hospital in Frankfurt had only one Optometrist making it impossible for soldiers to get needed eye exams. This was only one shortfall, but an especially glaring one. Through intensive efforts by the medical command over several excruciating weeks, all but twenty-five soldiers were qualified to deploy. Of that number, three women were pregnant (one was found fraudulent resulting in a court-martial), two soldiers were diabetic, several were asthmatics, one could not execute a family care plan and the rest were awaiting medical care through no fault of their own, or awaiting release from the Army via chapter action. The true rub in these numbers was that eight were NCOs and three were officers. While one may sympathize with profiles, it makes one wonder if the Army is truly serious about combat readiness when physically incapable soldiers are kept on active duty, and particularly overseas.

Those who were nondeployable were a drag on unit morale. Soldiers openly questioned why "disabled" soldiers were in the Army to begin with. Medical boards and the personnel system continued to keep the two diabetic NCOs on active duty despite the author's previous protestations. To other soldiers it was a question of fairness. The deployability issue crossed racial, gender and rank lines. When the issue was addressed with senior leadership during question and answer sessions at the Army War College, it was clear that the Army considers the subject too hard to handle leaving one to assume that it will be business as usual even in a much smaller force, a force expected to be highly deployable and lethal.

Some will argue that means are available for commanders to deactivate service members unfit for duty. The author will put his record for removing unfit soldiers from the Army against any. However, the current system is ponderous and many problems are not revealed until medical records are reviewed by competent medical authority. Further, the author's experience is that the upper echelons of the Army tend to resist releasing soldiers except under dire medical reasons. Can the Army afford this philosophy in a far smaller force? Hardly.

Of course fillers were brought in to replace nondeployables. For the most part these replacements were superb as they were necessary. As S.L.A. Marshall stated in Men Against Fire: The Problem of Battle Command in Future War, "it has happened too frequently in our Army that a line company was careless about the manner in which it received a new replacement. The stranger was not introduced to his superiors nor was there time for him to feel the friendly interest of his immediate associates before he was ordered forward with the attack." (5) This issue may be a function of where one finds themselves on the battlefield as well as when they join the unit. The author's observation was that problems with replacements varied with the new soldier's job, personality and rank. The more senior soldiers integrated faster while the junior tended toward a slower integration into the unit. Fortunately, most replacements joined the battalion prior to movement to Southwest Asia.

Families. Family Support Plans (FSP) were generally operable but only due to the extraordinary emphasis by the battalion commander. In

most cases soldier's plans were viable until deployment became reality. A serious lesson learned was that a child care provider's willingness to participate in a plan can quickly disintegrate. Reasons for this last minute bailout included a care provider's own departure from Germany due to the reality of a spouse's deployment. In one case, grandparents decided at the last minute not to take in their grandchildren. There was good reason to think that they believed their military child would not have to go to war if they refused to execute the FSP.

Worse, some soldiers, at least three cases, deployed into theater only to be notified days, or a few weeks later, that their care provider would no longer care for the children due to misbehavior, illness or other problems. This caused instant frustration and crisis for the deployed parent(s). The family support issue is excruciatingly difficult to handle in peace, never mind war. While the author offers no humane or politically acceptable solutions, it is nevertheless a problem with readiness.

The Army is unlikely to willingly absorb the social and political turmoil associated with hardening policies on soldiers with families. Yet, the fact remains that soldiers in a combat zone who worry continually about proper care for their children are not as efficient as the unit needs, and they can be a danger to themselves and fellow soldiers due to their preoccupation with problems at home.

Family Support Group (FSG) functions fell on spouses. The FSG requirement simply relies on volunteerism. Even as efficient and dedicated as the Frankfurt Military Command was in caring for families, they still

needed dependent volunteers to complete their mission. The 533d FSG began with great energy and vigor, but as time passed morale sagged and fatigue set in as the few tried to care for the many. Some unit families withdrew, others contributed to gossip and rumors and little else. Usually, problems in the rear quickly found their way to the deployed troops and vice versa. The age of instant communications and pay telephones on the battlefield was both a blessing and a curse.

There are some key lessons involved with FSGs. First, they are critical to unit readiness, but are not trained and resourced accordingly. A real training program for volunteers is needed along with formal recognition. Second, some families have problems which are just unsolvable by a FSG, the Army or anyone e.g. children left with care providers. It seemed to the author that company commanders were spending inordinate time working with dysfunctional families. A reasonable question is, has the Army gone beyond the point of reasonableness in caring for families? The term, "welfare Army" is openly used nowadays among leaders. Has the Army become a patron system and will the current demand placed on commanders at all echelons to care for every Army family hold up in a dramatically smaller force? Some soldiers seem convinced that it is the Army's duty to solve their personal problems including debt, marital, children and others.

It seems fair that if the Army places family care demands on commanders, then it ought to resource at battalion level an additional officer at the warrant grade who specializes in handling family problems. The 533d did not have so much as a chaplain authorized to handle counseling of soldiers

and families. It is as much an issue of readiness as humaneness. Soldier and family preparation was agonizing but on the whole successful.

The final personal lesson recalled is that readiness involves more than training, maintained equipment and high standards in both areas. Readiness involves an attitude towards relentlessly identifying and dealing with mediocrity. Sometimes that is like swatting gnats; tremendously annoying and difficult to measure progress. Despite a rigorous evaluation program, there were leaders of all ranks who should have been removed from their positions. For varying reasons (no replacement or hoped for improvement) these people were carried along until their due out date. Sadly, mediocre leaders poison their units. Retrospectively, it would have been better to be short in people than to suffer the barely adequate. Culling leaders early in command is needed, particularly if these leaders do not quickly respond to counseling.

The 533d, like the Army in Europe, never expected to conduct a "deforger". Preparing equipment for movement introduced new problems and worries as word filtered in almost daily that units were having terrific problems in Saudi Arabia. Vehicles organic to the 533d, such as two and one-half ton trucks, were advertised as useless in the desert. The battalion was totally dependent on these vehicles for all cargo carrying which was already in short supply. In short, the battalion felt it had little to look forward to in Saudi Arabia.

Interestingly, the sobering reality of deployment occurred when the unit basic load was picked up at the ammunition supply point. It was one

thing to allocate ammo to a load plan on paper and quite another to actually load it. For example, fifty caliber ammunition was loaded into the crew compartment of a track recovery vehicle (VTR) only to pinch an electrical cable and start a fire. The annual obligatory sample loadout of ammunition proved that seemingly insignificant training events can become very critical.

Time for warfighting discussions was limited, but a few sessions were held with battalion leaders. These were somewhat helpful, but since the urgent mission was movement preparations, it was hard to focus on warfighting. The division commander executed a commander's off-site conference with spouses invited. That was a gutsy team-building effort. It required every battalion and brigade commander to trust their executive officers or deputies to carry on war preparations. Additionally, the division brought in the BCTP staff for a week of warfighting discussions. Those two events were absolutely vital to final teambuilding preparations and to put things into perspective just prior to deployment. General Funk constantly imbued confidence into his subordinate commanders through professional development events and in his emphasis on the enormous combat power of the division. It was time well-spent during movement preparation.

CHAPTER 5

DESERT SHIELD

Deployment. Battalion equipment traveled by barge and rail to port in a mass. Yet it dribbled into Dammam, Saudi Arabia with the entire battalion stretched out on seven different ships. Unit integrity was lost altogether and was not reestablished until late January in Tactical Assembly Area (TAA) Henry. Junior officers frequently operating apart from the battalion headquarters kept control and accountability of soldiers and equipment and pushed materiel into western Saudi Arabia as fast as possible.

Valuable parts, and also nice-to-have equipment, were shipped in Sealand type containers. Those containers could not be located and used until after combat ended. Container control and tracking was an absolute failure. Had mission essential equipment been shipped in those containers, battalion readiness would have been jeopardized. The author has heard some of his combat service support peers place the blame at the unit level for failure to properly mark their containers. That will not wash since the 533d religiously followed division guidance on marking containers.

Assembly Area. Life in TAA Henry was nothing short of miserable.

January was exceptionally cold and wet. Weather was particularly cruel to the mechanics, and the battalion did not have a maintenance tent. Simply stated, an easily erected and highly mobile, portable maintenance shelter is needed by every unit. The virtually featureless landscape did nothing to deflect the weather.

A routine developed in the TAA beginning with daily stand-to, maintenance and training. Soldiers took their training seriously; no prodding required. Equipment was intensively maintained, although parts were a significant problem. The division main support battalion shipped spare parts in Sealand containers and experienced the same frustrations as the 533d in bringing them under control. Deadlined vehicles became fair game for parts to keep other vehicles running. Of particular note were shortages of glow plugs and generator brackets for HMMWVs. The 533d maintenance warrant officer had a stock of both parts. The glow plugs became valuable trading material with other units. Visitors arrived daily scavenging for parts. It is still hard to understand how something as simple as a generator bracket could become a mission essential part and yet be so difficult to obtain. Logistically, everything operated on a shoestring. Logistics bases were nightmarish with no one seeming to know where anything was.

Pre-combat Training. General Funk continued executing brigade and separate battalion command training beginning with a field expedient sandtable exercise. The division staff used a variety of materials, including rocks, to construct a scale model of the proposed attack zone with many units represented down to battalion, company and platoon level depending on unit

type. The sandtable was very effective in clearly illustrating the enormity of the challenge ahead. The uneducated observer could discern that command and control would be difficult even if communications were perfect. General Funk continued to hammer away at tight control to avoid fratricide. In fact, he emphasized that practically from the day he took command of the division.

Military Intelligence doctrine for offensive operations is discussed in FM 34-10. (6) The author's intent was to deploy the battalion's electronic collection assets according to doctrine which essentially meant placing those systems as far forward as possible and practical. However, the sandtable revealed that the division attack would be on a very narrow zone i.e. fifteen kilometers. One brigade would lead the assault initially. Obviously, the zone of advance would be very congested even with only a single brigade in the lead.

The assistant division commander for maneuver (ADC-M), Brigadier General Paul Blackwell, asked the author what the battalion could accomplish on the move. He already knew the answer. Nothing! Every asset required a halt and activation of a generator and the system including antenna erection. Teams could get their equipment into operation in fifteen to thirty minutes in most cases. However, the consensus was that there would be no halts if possible and certainly not long ones. The ADC-M did not want any more supporting elements forward than absolutely needed, and neither did the lead brigade commander. Speed and mobility were critical with none of the MIB assets possessing either. Like the rest of the Army, the battalion

was structured and equipped for a defensive fight in Germany; not for an offensive, rapid advance across a vast desert. There was no rejection by the senior leadership of the MIB, but rather a realistic appraisal of capability. It was, nonetheless, disheartening.

The GSRs and liaison officers which formed the brigade IEWSEs had been attached to the brigades back in Germany. It was determined to let the situation develop before adding to the IEWSEs. Brigade commanders, as stated, did not want any more support than necessary to conduct upcoming operations. Anything requiring fuel was considered carefully as to its value in a fight. No combat commander wanted any element that would slow his progress, require support and provide nothing in return. That appeared to be the case for the electronic resources offered by the MIB.

On the other hand, the battalion's counterintelligence teams had already moved out to support the rear security mission particularly around the giant logbases. The interrogators began their mission at the area prisoner of war cage. The LRSD was attached to the 4-7 Cavalry Squadron and would not rejoin the battalion until redeployment to Germany.

The main body of the 533d in the TAA consisted of the electronic warfare assets and support elements. While the battalion was operating within the parameters of doctrine, in a general support role, it was not task organized as one normally finds in most divisions with direct support company teams in the brigades. As discussed earlier, it was a blessing. The battalion had been afforded the opportunity to train in a general support role in Germany since the factors of METT-T dictated that role in Southwest Asia.

In TAA Henry, and due to extreme distances from the berm line and for security reasons, the battalion conducted no SIGINT collection while in the TAA except for monitoring friendly radio nets, as directed by General Funk, for operational security (OPSEC) purposes. Other than the OPSEC mission there was little to do in the TAA except train and maintain.

In regard to OPSEC, word filtered in from the battalion's rear detachment that the unit's location, and therefore the division, was known to everyone in Frankfurt. The rear detachment commander indicated that soldiers were calling home on the commercial phones in the TAA giving out unit locations in some detail and that this continued even after moving to the forward assembly area (FAA) Butts for the attack. Nor was this activity limited to the 533d MIB. The author has a difficult time believing that the Iraqi high command was not aware of VII Corps forces' locations in Western Saudi Arabia. Further, the TAA was crawling with Arabs in pickup trucks, some demonstrating more than an average interest in friendly force presence. In the author's opinion, it was not OPSEC procedures or deception efforts that concealed friendly locations, it was the sheer inability of Iraqi forces to do anything about it.

Evidently, from the sandtable exercise and commonsense insight, General Funk recognized that moving thousands of vehicles across open terrain day and night required not only exceptional command and control but also training. The result was a huge movement exercise known as a HUMMEX. Leaders down to company levels rendezvoused in the open desert some fifty miles east of the TAA. Each battalion-sized element was give a grid coordinate which

was located using a Global Positioning System (GPS). (Maps, the few available, were useless in the expansive terrain. Movement was conducted by azimuth and compass. Even with the much publicized GPS, the battalion only had seven, meaning that a compass remained the primary guidance system.) Portable navigation systems are a must regardless of area of operations. The issue is troop safety if nothing else. Way points were provided for the division center of mass along the zone of advance. The idea was to have the division turn as required using the way points. That was the only way to denote a common point of reference for dozens of units and hundreds of vehicles. Since spacing between units was based on the expected reality in the attack, one oftentimes could not see an adjacent unit except with binoculars. Once dust was kicked up, or a natural duststorm occurred, then one was simply out of contact with other units visually. When the movement exercise began, it proved incredibly difficult to execute even in good weather. The first effort was rough. At an after-action review (AAR), the division commander decided to repeat the exercise a couple of days later using a representative type of each vehicle found in the division.

For HUMMEX II, the 533d was obliged to bring along a fuel truck, wrecker, a track recovery vehicle, and the slowest of the slow, the M1015 mounted Trailblazer. All those were in addition to the normal HUMMVs from HUMMEX I. Once again the division moved in unison for most of the day. The rehearsal was worth the effort and once again demonstrated that training must continue up until the actual attack. The HUMMEXs increased the confidence in all 533d participants. The Trailblazer proved to be more mobile than believed,

but the strain on the mechanical systems was hard, and it was still terribly slow. The two exercises reduced the fog of war considerably but not necessarily the challenge of executing the attack.

Probably the fundamental lesson from the sandtable and movement exercises was that only a limited imagination limits training in a harsh environment. Any activity that keeps skills sharp and confidence high is worth risking equipment in the process, which leads into an area of training that was tough and risky; night driving and navigation.

Night driving skills are essential. Like load planning, night driving in Germany was tough to do for many good reasons, not the least of which was simply being in Germany. The battalion possessed a handful of night vision devices (NVD) which are truly needed for reasonably safe operations. The command sergeant major devised a night driving course in TAA Henry, but that was not enough by itself to establish the confidence really needed as discovered during the movement to FAA Butts.

The 533d cross-country move to the FAA was one of those events that one reads about in history books that sounds so botched as to be humorous. At the time the operation was anything but funny. The move was reasonably smooth although challenging. The criticality of meeting start point times and critical point times was evident. The battalion met all of its movement requirements beyond the author's expectations; that is, until night. Between darkness, fatigue and inexperience; by about midnight, the 533d convoy began struggling. The later it became, the worse command and control became. Eventually, movement had to be stopped due to overriding safety concerns

in an area of uneven terrain and stuck vehicles.

Dawn revealed the truth. From a hilltop the author could see every element of the battalion dispersed in clusters and laager. The only missing event was an Indian attack. The worst part was that the move was not conducted on radio listening silence as wisely permitted by the division. Despite good communications, the unit had still gotten into a snarled mess. An AAR revealed that those involved in the prior HUMMEXs experienced far fewer problems. FM 25-100, Training the Force, states categorically that the goal is to train as you expect to fight. (7) The night move of the battalion minus was a first time event under blackout conditions.

As a retrospective lesson learned, commanders need to examine battle tasks within their mission essential tasks list (METL) to determine which tasks that cannot be done to standard. For example, the battalion movement order contained instructions for night visual signaling. That may sound simple on paper, but it had never been practiced in Germany. One officer remarked at the AAR, "we saw the green star cluster but didn't know what it meant". Whether one realizes it or not, a unit can be victimized by assuming away small training tasks that later become critical. For the author, the operations order paragraph containing communications instructions took on new meaning. Soldiers involved in the night move called it "the convoy from hell".

CHAPTER 6

DESERT STORM

In the FAA the 533d still did not have doctrinal communications with the 207th MI Brigade. The 3d Armored Division fielded Mobile Subscriber Equipment (MSE) only weeks prior to deployment whereas the remainder of VII Corps had not. This of course created significant problems everywhere in the organization. Even dedicated intelligence circuits, such as the sophisticated data processing Technical Control and Analysis Center, could not link either due to distances, or the prior lack of training with VII Corps counterparts in Germany. In any case, the battalion never had the required network of communications save for one lone radio teletype rig which simply could not provide the needed support.

Despite the valiant efforts of the intelligence community to provide upgraded communications systems to the battalion, there was simply not enough time to integrate them through training. The proverbial handwriting was on the wall concerning tactical SIGINT collection. The VII Corps airborne SIGINT system, Guardrail, reportedly was having no luck in detecting Iraqi

communications. That was an early tip-off that the 533d ground-based systems were doubtful of doing any better. Guardrail could look deeper into enemy territory and was a more sophisticated system. It just did not look good for the 533d electronic warfare mission.

Activity in the FAA concentrated on getting down to fighting weight. Division guidance dictated that enough food, fuel, water and ammunition was to be carried to sustain the unit for up to ten days. For the 533d that meant leaving behind a lot of life support equipment such as tents, mobile kitchen and around eighty soldiers such as cooks and clerks. The author wondered continually, as load planning became more worrisome, why the Army did not provide a light trailer for the HMMWV. Such a trailer would have solved all of the battalion's hauling problems. No additional larger trucks would be needed with their attendant maintenance expenses. The Army ought to take a look at the trailer issue as a cheap fix to low level hauling needs.

Troop Morale. There was continued concern, and fear, of the Iraqi chemical threat. Unit capability to detect chemicals was poor at best given the shortage of detection devices and batteries to power alarms. Additionally, the dusty mustard threat presented a major worry due to difficulty in detection and potency. The author never experienced a comfort factor in regard to the chemical or biological threat. The untried nerve agent antidote tablets did not improve confidence to any appreciable degree. The tablets were compared to Agent Orange by a lot of soldiers.

Biological agents were a close second to chemicals for concern. Issuing

the Anthrax antibiotics probably heightened fears more than it helped. It was much like the heralded arrival of the 533d share of "body bags". Neither event proved morale builders.

Leaders cannot take anything for granted that has potential for affecting unit morale whether pills, body bags or families back home. There has to be a constant flow of information to soldiers honestly and forthrightly. Hindsight again indicates that the author might have done more to communicate directly with soldiers instead of relying so much on the chain of command. As in the case of the green star cluster signaling, information flowing down the chain of command too often becomes garbled, or does not get through at all. A case in point involved the soldiers remaining in the rear during the attack. Many believed they were remaining behind because they were considered not good enough when in fact it was a space and critical skill issue.

Everyone seemed to reach a point of "let's get this overwith, screw the chemicals, mines and disease". The cumulative effects of stress, cold, poor diet and substantially poor living conditions were taking their toll on attitudes and clear-headed thinking, including the author's own. Any creature comforts were vastly important to morale. Like other units, the battalion managed its own Post Exchange out of the back of a pick-up truck. Any pogy bait was welcome relief to Army rations which, though providing an adequate diet, were nonetheless boring and tasteless. The Army needs to seriously address the quality of its current field rations.

The Attack. The division attack is concisely described in the Army

Times dated 13 January 1992. (8) Though the review is anecdotal in nature, it provides a reasonable description of the attack. The 533d followed on the heels of the 1st Brigade at the "invitation" of the brigade commander. The brigade commander evidently figured he might get some use from the MIB, and it might as well be in a position to support him. Considering the narrow zone of action, no antiarmor protection and fratricide worries, the brigade commander's invitation was welcome indeed.

The battalion moved in two columns usually a hundred meters apart. During the attack the 533d collection assets were deployed doctrinally only once much to the chagrin of soldiers and some leaders. With the inherent dangers of minefields, fratricide and navigation, the author decided to keep the battalion intact conducting "hearability" tests at halts. There was no evidence that the Iraqis were communicating in the frequency ranges that the unit could detect. As a believer in the risk assessment process, it was not worth the risk to spread out our assets.

Every type of weather condition pounded the assault: rainstorms, electrical storms, duststorms, cold and wind. Executing a sleep plan was impossible since the attack experienced only brief halts. Soldiers slept whenever and wherever possible. The author experienced his worst fatigue in a twenty-one year career. For that reason, the battalion S1, a signal officer, was drafted to ride as a third member in the author's HMMWV to serve as navigator, radio operator and assistant driver when needed. That may have been the soundest decision the author made given the situation and the outcome. In the author's opinion, a third set of ears and an

additional brain in the command vehicle adds a measure of safety to an operation, particularly in times of great stress.

The MIB did manage to keep up with the advance but that was due to its start and stop nature. Clearly, the battalion's equipment was unsuitable for the high mobility and crew protection task. The author maintains low confidence in currently fielded systems for the Desert Storm type of battlefield, and considered it a fortunate event that the Iraqi Army decided not to communicate. It was a keen disappointment not to contribute to the electronic warfare battle, but at least the interrogators and other intelligence skilled soldiers were able to support. There was certainly no lack of prisoners to interrogate.

As previously indicated, the LRSD was attached to the 4-7 Cavalry Squadron. What it actually did in the battle is still unknown to the author. However, it was never deployed deep into enemy territory per doctrine. The author's assessment is that LRSD is unnecessary at division level. If retained at all, it ought to be integrated with the Long Range Surveillance Company at corps level.

The GSRs saw action since they were deployed far forward with combat forces. However, their capability in the open terrain was usually exceeded by optical devices including binoculars during daylight. The current GSR ought to be upgraded and supplemented with a quality electro-optical system. Unquestionably, the GSR teams were in high demand by brigade commanders.

CHAPTER 7

AFTERMATH

On 1 March, the 533d was just inside Kuwait and exhausted. Like its sister Air Defense Artillery (ADA) battalion, the MIB had not fired an electron in anger. The author's personal reconnaissance of Iraqi command and control sites verified the sophisticated hardwired communications available to the Iraqi leadership. Still, it would have been far more satisfying to all to have actively collected information for targeting. Too, the author was seriously concerned that the history of the war would reflect badly on Military Intelligence CEWI units particularly with the build-down underway. Rather than being grateful at the time that the Iraqis chose not to communicate, and therefore complicate the friendly operation, the author was angry at not being able to prove CEWI's worth. Such are the mental meanderings of a tired mind.

In a few days the division transitioned from battle to peacekeeping and refugee control. Battalion electronic collection assets moved up to the ceasefire line to monitor any Iraqi residual forces while the interrogators and counterintelligence soldiers supported the forward brigades

with refugee screening and other security missions.

Post-Combat Morale. Battalion life settled into a waiting-to-go home routine. Five soldiers were able to return to Germany almost immediately. The author chose the five based on hardship which usually involved children. This was the beginning of a major morale issue as more and more soldiers presented reasons why they also needed to go early. They all had good reasons. An order of merit list was created if the early return opportunity arose again. A number of Red Cross messages also began arriving announcing all sorts of family emergencies; most bonafide. The number became large quickly. There was a risk that the soldier population could fall rapidly enough as to reduce readiness to unacceptable levels. This was supposedly a divisionwide problem. Ultimately, VII Corps decreed that no soldier would be authorized early return without the personal approval of the corps commander. This also involved the 3d Armored Division commander who was now MG Jerry Rutherford. It did not escape the notice of soldiers and leaders at all levels that the division commander and his chief of staff were pulled out early. That decision by the obscure Army leadership only gave rise to rumors. Among soldiers, it disparaged for awhile, the good name of a great division commander since the division was still on the battlefield. The Army, in the author's opinion, failed miserably with early returnees and in changing division commanders when it did.

Without adequate and reasonable information, soldiers will quickly define for themselves the truth of an issue. Experience proves to the author that soldiers will worst-case an issue everytime. A case in point

involved the division's return home. Advance parties were already at the aerial port of embarkation at King Khalid Military City (KKMC). The Secretary of Defense paid a visit to the refugee camp at Safwon. The following day an announcement was made that a brigade of the 3d Armored Division would remain behind for peacekeeping purposes in Kuwait. The 1st Brigade was selected. Their advance party was brought back from KKMC to rejoin the main body in Kuwait. The brigade retained its support slices which meant the GSR section and liaison officer from the 533d. Immediately, soldiers concluded that senior leadership knew about the mission all along, but that it was withheld from them so morale would be good during Secretary Cheney's visit. Troop morale can be fragile. Of course family members in Germany were expecting the advance party from 1st Brigade to come home to be followed by the main body soon. Their hopes had been built-up via the commercial telephones. Accurate and honest information is vital and changes have to be carefully explained. Everywhere the author traveled, troops were heard saying, "not one more lie", which was a take-off of the theater safety slogan, "not one more life".

With the battle over, and time on soldier's hands, the harsh environment once again became the focus of misery. Between blowing dust, oil clouds, swarms of flies and brutal heat, the final assembly area in Kuwait was awful. Anything that can be reasonably done to make soldiers more environmentally comfortable is money well spent since it enhances readiness. Ideas that comfort breeds softness is simply absurd. Heat and cold are debilitating to everyone. The slightest effort toward improving living

conditions increases morale and efficiency. Anytime a hot meal is served, or fresh food made available and consumed in a comfortable location, the positive effect is noticeable and lasting.

When soldiers perceive that other units are living better, it not only hurts morale, but also damages the confidence level in their own leaders. For some reason while in Kuwait, maneuver brigades were given first priority for ice. If any ice was left, it was then equally distributed to the separate battalions. On one occasion, this meant that well over two hundred 533d soldiers had to divide seventy-five pounds of ice. (9) Decisions like that destroy morale. In the author's opinion, it is in the best interest of readiness for the Army to develop equipment specifically oriented for troop comfort. Only imagination will limit development in this area.

CHAPTER 8

OTHER LESSONS AND OBSERVATIONS

Doctrine. Doctrine is not only valuable, it is essential to everything a unit does. It provides the basis for a standardized roadmap in all unit activities and for conducting operations in concert with other units. Just as important is having a division commander that draws his philosophy from doctrine rather than forcing doctrine into his philosophy. The author's recollection is that General Funk hardly, if ever, engaged in philosophizing. He concentrated on the basics of warfighting which gave fundamental direction for training and readiness.

Command Net. Commanders in the division understood General Funk's intent at all times. This was particularly true regarding firepower with his vehement emphasis on placing fire on the enemy and not soldiers. He continually conveyed intent as well as specific orders over the division command net which was sacrosanct. Only commanders were authorized to transmit over that net. The result, particularly during the hundred hour fight, was an accurate exchange of unimpeded information among commanders. The

net reflected an air of control and confidence among senior leadership which was considerably reassuring. Just hearing the "old man's" voice boosted morale. The author's driver commented that the division commander sure seemed to know what he was doing. The command net was completely successful and was made that way by the division commander.

Women. Despite evidence that women perform their jobs with as much distinction as men, questions still arise over women's performance during the deployment. From the author's perspective, concerns about female soldiers' endurance, modesty, hygiene or males taking undue risks to care for women, are misplaced. There were no greater problems involving women than men. During the ground combat phase women performed just as well as men. Of the top five company grade officers in the battalion, three were women; of the top ten, the figure would be five or six. One anecdote involved a female cook, a sergeant, who sneaked in as a driver of one of the five ton fuel trucks to avoid staying in the rear during the fight. She performed a key role with great distinction. Without question, women were as resilient as men and in all areas, and save for brute strength, just as capable.

Leadership Style. One of the most troublesome aspects of the author's desert experience was discovering that a hands-off leadership style in Germany did not work very well in war. As a true-believer in delegating, expecting mistakes and giving subordinates the room to do their jobs without micromanagement, the author found himself suddenly interested in detailed information that heretofore was not required from the staff. The battalion

executive officer and staff now had to provide more detailed feedback with not a little consternation. Changing a leadership style during a deployment is not good for command climate. There may be a happy medium with this issue but the author left command before finding it.

Fatigue. Without repeating previous words concerning fatigue, this commander was profoundly impressed with fatigue and its effects. Already mentioned as factors were weather and dull food. The inability to do meaningful physical training was disheartening as well. It could have been done, but the hygiene factor entered into the picture. Too, commanders want to live like their soldiers, neither better, and hopefully not worse. However, there must be a balance between image and commonsense. A tired commander with a tired mind can become deficient and detrimental to his command. While the author does not propose special favors for commanders, it would be of great service if each battalion and higher commander had an enclosed van or trailer compactly equipped with a work area, cot and perhaps a toilet. Many commanders already have unauthorized vehicles for this purpose. Of course this becomes problematic in light units. Hardiness is a virtue, but foolhardiness out of a fatigued commander is dangerous.

CEWI. Doubtless the most sensitive issue then and now is the efficacy of CEWI. The value of CEWI units has been questioned almost since their inception. Regrettably, the ground war did not help the issue and has probably served to cloud the debate. Importantly, the issue does not involve the quality of CEWI soldiers; indeed, they are unsurpassed in quality.

In the June 1990 issue of Military Review, Colonel John Hammond, an

MI officer, wrote an article entitled, "CEWI--A Vision for the Future". He made a grating case of CEWI unit's basic unpreparedness to support combat units and presented a variety of reasons. (10) Language preparedness figured into Colonel Hammond's argument to some degree. As events materialized in the Gulf War, the author more than once hearkened back to that article since the 533d had no Arab linguists assigned. The quick fix for that shortfall was the introduction of native Kuwaiti linguists rushed in to sit sidesaddle with American operators of collection systems. Without belaboring the difficulty of that operation, it does define the problem that CEWI units have with attracting, training, and most difficultly, maintaining qualified linguists.

Without question, language maintenance was the most exasperating aspect of 533d training. It is time consuming, expensive and requires exceptionally motivated soldiers who also must meet every other unit and Army requirement for training as well as maintaining their electronic system or other equipment. The author believes that the training issue may be unsolvable to the degree required to field expert linguists particularly in the future of regional conflict and a contingency Army. More must be done to solve the language issue. The infusion of Kuwaitis into the 533d was a good idea for an immediate problem; however, it is not a good, reliable solution to an age-old CEWI problem.

The structure of CEWI will have to change to meet the future to be sure. However, it must remain with corps and divisions if for no other reason than to assure that a teambuilding process takes place. Language

requirements can be reduced as more imaging systems are brought to the tactical level, and MI units can house more support to the G2s. There may be a great temptation to throw out the entire concept based on faulty lessons from Desert Shield and Desert Storm. That would be a big mistake.

CHAPTER 9

CONCLUSION

As mentioned earlier, the author's journal is far more detailed, as well as emotional, in describing events briefly covered in this paper. It is always easy to search for and to find negatives even after good performance. General Funk warned his commanders that Americans do not handle success well and would pick things apart in self-critique. He also warned of an emotional letdown following combat which turned out to be true. (11) One can always think of things to have done differently, and it is always easier to criticize others whether seniors or subordinates. The fact remains, the Army performed magnificently and every soldier everywhere shares the credit.

It has not been the author's intent to present an exhaustive review of the 533d MIB during his tenure nor to address in detail the unit's wartime experiences. Rather, it has been to tell part of the story from one perspective focusing on aspects of doctrine and other occurrences that lodged in memory; some significant, others less so.

From wherever one stands, command in a theater of war is demanding

as no other. The demands on the physical, mental and emotional capacities of leaders, soldiers and families is immense and profound. The impact of the experience is long lasting as evidenced by the memories of elderly veterans from past wars. For a soldier, the memory that he or she did their best at the time brings considerable satisfaction.

There can be no argument that the Army fighting and training doctrine worked as did MI doctrine. Neither is there doubt that soldier training and caring paid off. The Army system of schools must survive to continue to field the best leaders and followers. Tools such as BCTP and CMTC very possibly made the difference; perhaps decisively.

The Army must make every effort to preserve and even expand opportunities for its leaders to learn the profession of arms from those who do it best. The example of placing former battalion commanders into CAS3 is the right way. That ought to be expanded at every service school. It is criminal to have inexperienced soldiers teaching others.

Lastly, senior leaders that know their business, and above all, know how to put it into practice on the battlefield are priceless. More than a little mention has been made about MG Paul Funk for good reason. He, by virtue of his wisdom and will, formed the 3d Armored Division into a cohesive fighting team. He trained his division thoroughly and with great love for his soldiers. When the battle was joined, as S.L.A. Marshall said, "in battle, the voice of the leader is always needed to call men back from carelessness". (12) Those few words sum up General Funk's devotion to his soldiers.

The author still finds it an emotional episode to rethink his days of command in recognizing the privilege it was to lead great soldiers in a great cause. Moreover, victory has a superb flavor all its own.

ENDNOTES

1. Department of the Army, Field Manual 34-10, Division Intelligence and Electronic Warfare Operations, November 1986, 2-6--2-12.

2. Department of the Army, Field Manual 34-80, Brigade and Battalion Intelligence Electronic Warfare Operations, April 1986, 2-40--2-46.

3. Colonel Roger H. Nye, The Challenge of Command; Reading for Military Excellence, (Avery Publishing Group Inc., 1986), 2,3.

4. Field Manual 34-80, 2-65--2-67.

5. S.L.A. Marshall, Men Against Fire: The Problem of Battle Command in Future War, (Peter Smith, 1947), 42.

6. Field Manual 34-10, 5-9--5-16.

7. Department of the Army, Field Manual 25-100, Training the Force, November 1986, 1-1.

8. Steve Vogel, "The Tip of the Spear", The Army Times, 13 January 1992, 8.

9. LTC Henry Shirah, Personal Journal from Desert Shield and Desert Storm, 118.

10. Colonel John C. Hammond, "CEWI: Vision for the Future", Military Review, (June 1990), 62.

11. LTC Henry Shirah, Personal Journal, 104.

12. S.L.A. Marshall, Men Against Fire: The Problem of Battle Command in Future War, 142.

BIBLIOGRAPHY

Department of the Army. Field Manual 22-100. Training the Force. November 1986.

Department of the Army. Field Manual 34-10. Division Intelligence and Electronic Warfare Operations. November 1986.

Department of the Army. Field Manual 34-80. Brigade and Battalion Intelligence Electronic Warfare Operations. April 1986.

Hammond, John C. Colonel. "CEWI: Vision for the Future." Military Review. (June 1990): 58-68.

Marshall, S.L.A. Men Against Fire: The Problem of Battle Command in the Future. Peter Smith, 1947.

Nye, Roger H. Colonel. The Challenge of Command: Reading for Military Excellence. Avery Publishing Group Inc. 1986.

Shirah, Henry C. Lieutenant Colonel. Personal Journal. 1990.

Vogel, Steve. "The Tip of the Spear." The Army Times. 13 January 1992.